

# **“Progressive” and “Regressive” Taxes**

**Prepared for the Tax Reform Committee  
Created by HB461, 2003 Legislative Session**

**November, 2003**



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## Introduction

This paper discusses and defines “regressive” and “progressive” taxes by providing the standard, textbook definitions of these terms, and provides examples of regressive and progressive taxes.

In a broader context, these terms fall under the general guiding principle of taxation that states that a high quality revenue system treats individuals equitably or fairly. There are two concepts associated with the equity principle: the benefits received principle and the ability to pay principle.

*The benefits received principle* asserts that those who enjoy the benefits of government services should bear the burden of taxation in proportion to the amount of benefits received. This principle links the expenditure and revenue sides of the budget, and also links tax burdens with benefits derived from government. Highway tollbooths provide a typical example of the benefits received principle in that taxpayers pay directly in proportion to the benefit received from the specific government service provided. Montana’s gasoline tax is another example of taxation reflecting the benefits received principle.

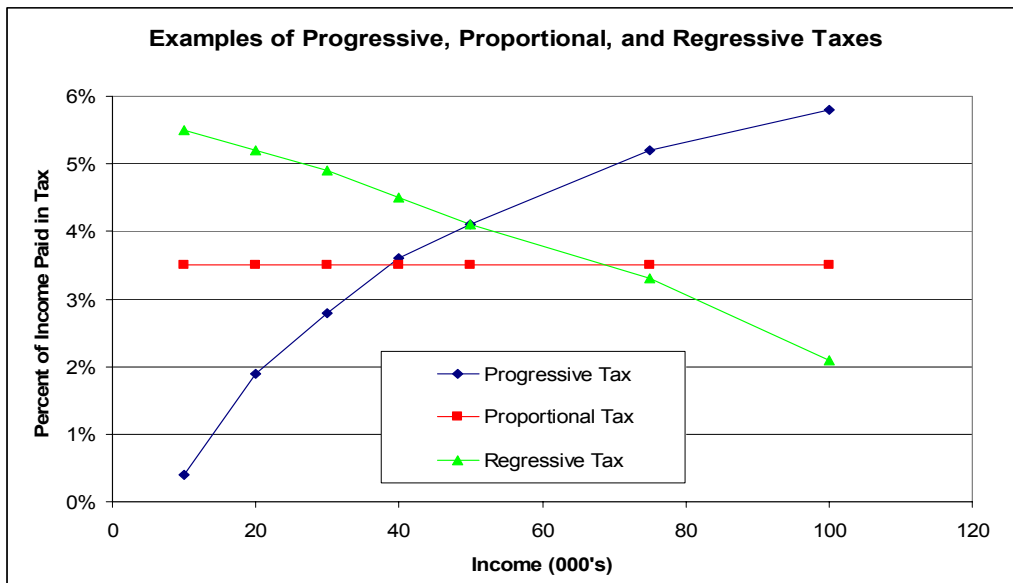
*The ability-to-pay principle* asserts that tax burdens should be related to an individual’s ability to pay based on economic well-being, generally measured by income. In this context, tax burdens are measured by the ratio of tax liability to total income.

Ability to pay involves both *horizontal equity* (persons with roughly equal economic capacity paying about the same amount of taxes) and *vertical equity* (persons with greater economic capacity paying more taxes). Individual income taxes, even so-called “flat” taxes, generally incorporate the ability-to-pay principle in that most income taxes increase with a person’s ability to pay (again, as measured by income) without any direct correlation to government services received.

Vertical equity is measured in terms of whether the tax is progressive, proportional or regressive:

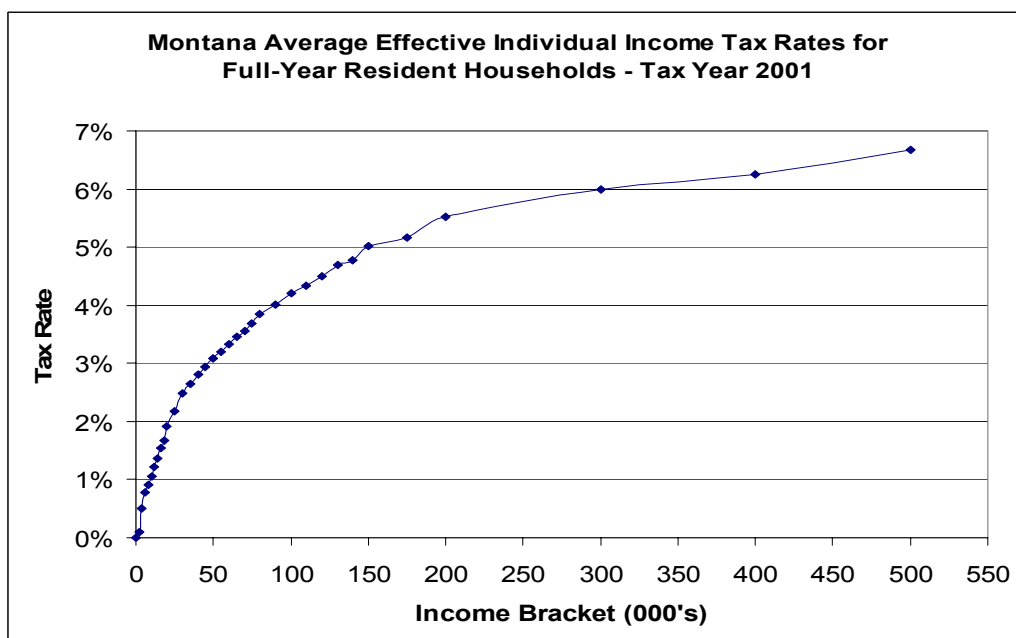
- A tax is **progressive** if the proportion of income paid in tax increases as income increases.
- A tax is **regressive** if the proportion of income paid in tax decreases as income increases.
- A tax is **proportional** if the proportion of income paid in tax is constant as income increases.

The following chart illustrates the concepts of progressive, regressive and proportional taxes:



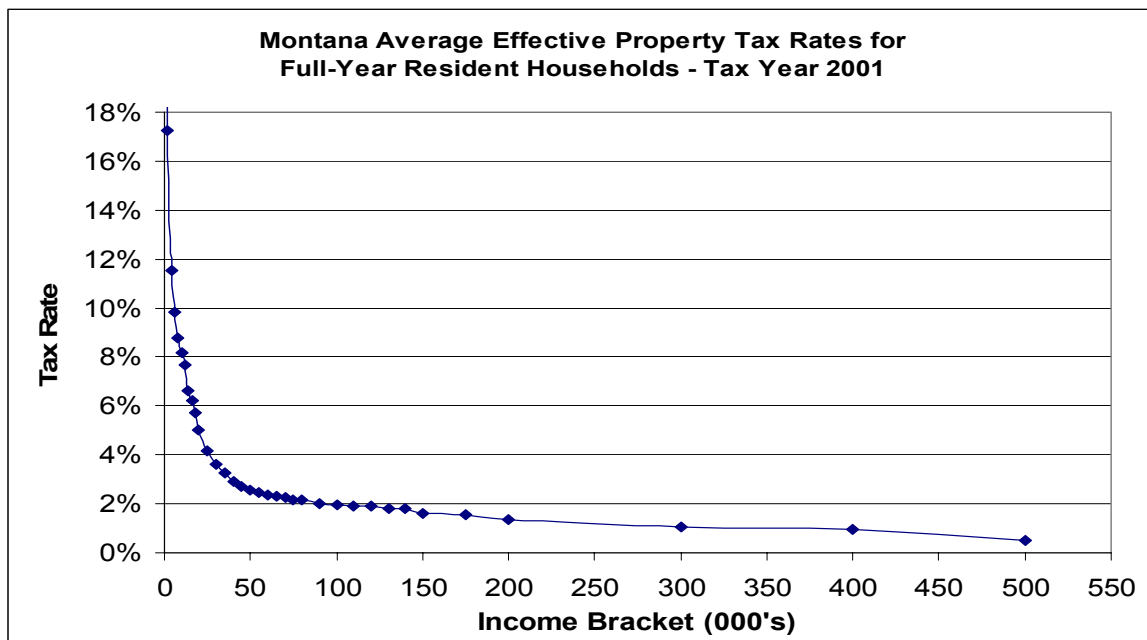
### **Regressivity and Progressivity – Individual Income Tax**

The federal income tax, and most states, has income taxes that can generally be characterized as being progressive. The chart below illustrates that Montana's *individual income tax* is highly progressive, with average effective tax rates ranging from 0% to 6.7% for households with incomes of \$500,000 or more.



## **Regressivity and Progressivity – Homeowner Property Taxes**

Studies of homeowner property taxes are not as common among the states, as in many states it is very difficult to provide a match of property taxes with incomes. In those states where homeowner property taxes have been studied the results indicate that property taxes are either close to being proportional over much of the income range, or are somewhat regressive. The following chart would indicate that *homeowner property taxes* in Montana are very regressive at low-income levels, but much less regressive over higher income levels.



## **Regressivity and Progressivity - Business Taxes**

While conceptually simple to demonstrate, the concepts of progressivity and regressivity are often difficult to quantify practically. This is true particularly in the context of taxes paid by businesses, such as corporation license taxes. In large part this is due to the fact that it is not clear who actually pays taxes levied on and collected by businesses. While it is clear that the “statutory incidence” of the tax lies with the business (which is to say that the business owner is responsible for collecting and remitting the tax to the state), it is not at all clear where the “economic incidence” of the tax lies.

Depending on both labor and product market conditions the ultimate incidence of any tax on business may fall on labor, in the form of reduced wages or benefits; on consumers, in the form of higher prices; or on the owners of capital, in the form of reduced profits. In the absence of any ability to accurately attribute the incidence of

business taxes to these various factors of production, it is practically impossible to ascertain the progressivity or regressivity of most business taxes. Consequently, the discussion of regressivity or progressivity is generally limited to and focused on those taxes paid directly by individuals, such as the individual income tax, homeowner property taxes, and, in some cases where simplifying assumptions have been made, the general retail sales tax.

### **Regressivity of Sales Taxes**

Much has been written, particularly in recent years, on the regressivity of the general retail sales tax. In the past, it was generally taken for granted that sales taxes were regressive by nature. This notion was supported in large part by the fact that higher income households tend to save a greater portion of their incomes than do lower income households. Consequently, a larger share of income in high-income households was not subject to the sales tax thereby reducing the effective tax rate for these households relative to lower income households, where most, if not all, income was spent.

Historically, studies of the regressivity of sales taxes relied on the annual income approach, which measured sales tax paid as a share of current incomes in any given year. These studies supported the notion of the sale tax being a regressive tax.

More recent studies have incorporated the “lifetime incidence approach” to studying the regressivity of the sales tax. Under this approach, tax burdens are not related to current or annual incomes, but instead are related to an estimate of lifetime incomes of the household. This approach holds that studies using the annual approach fail to take into consideration that in any particular year incomes of many low-income households are temporary in nature, and do not reflect long-term household consumption patterns. In these studies, sales tax liabilities are related to consumption expenditures as a proxy for lifetime earnings capacities.

While the lifetime incidence approach has provided evidence that the annual income approach greatly overstates the regressivity of the sales tax in the long term, there remains no general consensus that sales taxes are not regressive, but do appear to be less regressive than otherwise thought to be when examining the regressivity of the tax from an annual income perspective. Studies of the regressivity of the sales tax using the lifetime income approach are frequently criticized on the grounds that there is no hard evidence that current consumption represents a good proxy for lifetime income.

## **Mitigating the Regressivity of the Sales Tax**

What is clear is that there are many policy options available to reduce the regressivity of the retail sales tax, and perhaps even eliminate the regressive aspect of the tax altogether. There is general agreement, for example, that exempting food purchases acts to make the tax less regressive, whereas including a large number of services in the tax base acts to make the tax more progressive. Perhaps the most potent option available to policy makers to mitigate the regressive aspects of sales taxes is to provide rebates of sales taxes to low-income households. This can be done in a variety of manners. In Montana, the most common method of providing a low-income rebate of sales taxes in sales tax legislation has been through a *refundable* credit against the individual income tax. Generally, these proposals provide either a fixed dollar amount of credit based on the number of persons in a household, or a flat dollar amount of credit per-household, regardless of the number of persons in the household. The credit amount is then phased out as household incomes increase to a point where no credit is allowed above a selected income level.

## **Degree of Progressivity or Regressivity**

In addition to determining if a particular tax is either regressive or progressive in nature, policy makers are also interested in knowing whether particular policy changes result in a tax being either more progressive or more regressive. To this end, economists have devised a variety of indexes that can be used to measure the degree of progressivity or regressivity. These indexes allow policy analysts to determine if a particular policy proposal results in a tax system that is more or less progressive or regressive. One such measure, known as the “Suits Index,” named for its creator, Daniel B. Suits, is widely used by state and federal policy analysts.

Essentially, the Suits Index measures the relationship between taxes paid and incomes across the income scale to derive an index that registers between the values of  $-1$  and  $+1$ . A value of zero indicates a perfectly proportional tax system, whereas a value greater than zero indicates a progressive system, and a value of less than zero indicates a regressive system. A policy proposal that increases the Suits Index from a value of  $0.11$  to a value of  $0.15$  would indicate that the policy proposal would result in a tax system slightly more progressive than the current system.